| DOCKETED         |   |
|------------------|---|
| Docket Number:   | 21-BUSMTG-01  |
| Project Title:   | Business Meeting Agendas, Transcripts, Minutes, and Public Comments |
| TN #:            | 238861  |
| Document Title:  | Presentation - July 15 2021 Business Meeting                        |
| Description:     | N/A   |
| Filer:           | Dorothy Murimi  |
| Organization:    | California Energy Commission  |
| Submitter Role:  | Public Advisor  |
| Submission Date: | 7/14/2021 1:28:19 PM  |
| Docketed Date:   | 7/14/2021   |



## California Energy Commission Business Meeting July 15, 2021 10:00 a.m.





## Pledge of Allegiance

I pledge allegiance to the Flag of the United States of America, and to the Republic for which it stands, one Nation under God, indivisible, with liberty and justice for all.



# Sign up for #FlexAlert notifications





## **Remote Compliance**

Business Meeting held remotely, consistent with Executive Orders N-25-20 and N-29-20 and the recommendations from California Department of Public Health to encourage physical distancing to slow spread of COVID-19.

For remote participation instructions visit **CEC's Business Meetings** webpage:

https://www.energy.ca.gov/proceeding s/business-meetings If Zoom's toll-free phone numbers don't work:

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- Dial: (669) 900-6833
- Meeting ID: 938-6923-0237



## **Public Comment Instructions**

- Pursuant to California Code of Regulations Title 20 §1104(e), any person may make oral comment on any agenda item.
- Comments may be limited:
  - to 3 minutes or less
  - 1 representative per organization
- Any person wishing to comment on information items or reports (non-voting items) shall reserve their comment for the general public comment portion of the meeting agenda.

#### Zoom App/Online

Click "raise hand"

#### Telephone

Dial (669) 900-6833 or (888) 475-4499 Enter Webinar ID: 938 6923 0237

- Press \*9 to raise hand
- Press \*6 to (un)mute

#### When called upon

Public Advisor will open your line Unmute, spell name and state affiliation, if any, for the record, then begin your comments



#### a. Cuberg, Inc. Contact: Josh Croft



#### Item 2: ACKNOWLEDGING THE CONTRIBUTIONS OF MUOI-LYNN TRAN

Linda C. Barrera, Chief Counsel Chief Counsel's Office



## Item 3: Russell City Energy Center: Petition for Temporary Safety Modification

July 15, 2021 Business Meeting

Presented by Elizabeth Huber, CME Office Manager John Heiser, Compliance Project Manager Jared Babula, Lead Counsel Siting, Transmission and Environmental Protection Division



- Responds to California's urgent need for additional capacity
- Allows black-start BESS for Summer 2021's net peak demand



# **Overview and Key Milestones**

| Date    | Action  |
|---------|---|
| 9/11/02 | CEC approved license  |
| 10/3/07 | Petition to relocate project 1,300 feet from original location approved |
| 8/8/13  | Power plant came online   |
| 2/20/19 | Black-start BESS installed  |
| 6/3/21  | Petition for temporary safety modification filed                        |
| 6/18/21 | Staff approved project change report posted for public comment          |

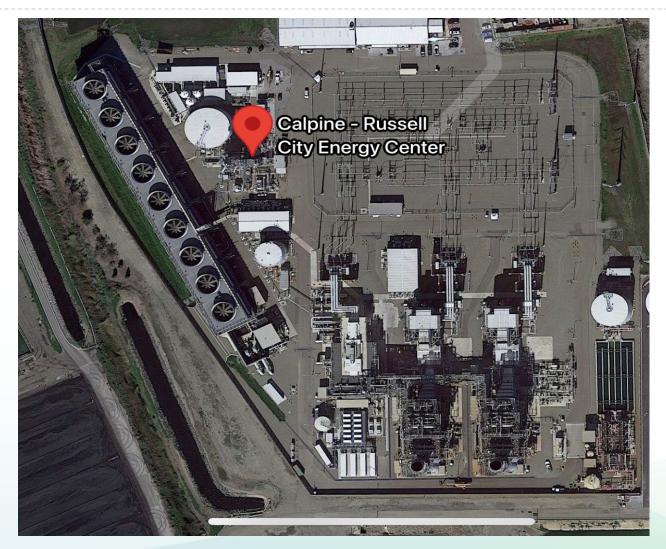




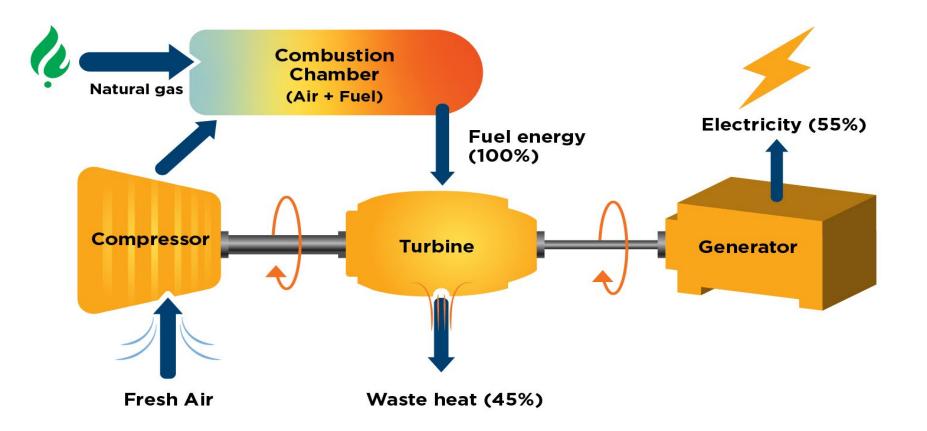


#### **Activities:**

- 1. Install isolating plate
- 2. Install rupture disk
- 3. Install pressure relief vent to condenser
- 4. Retrofit for simple-cycle



**Turbines in Simple-Cycle Mode** 



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• Approve proposed temporary safety modification.



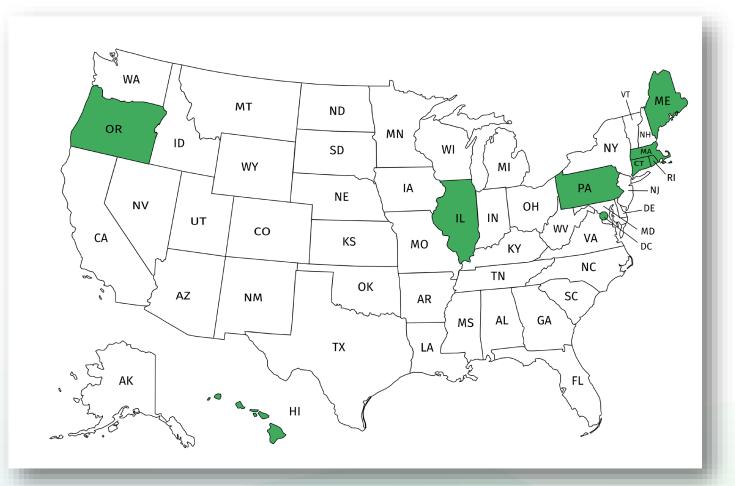
## Item 4: Appliance Efficiency Regulations for Portable Electric Spas (20-AAER-04)

July 15, 2021 - Business Meeting

Jessica Lopez, Air Resources Engineer Efficiency Division, Appliances Office



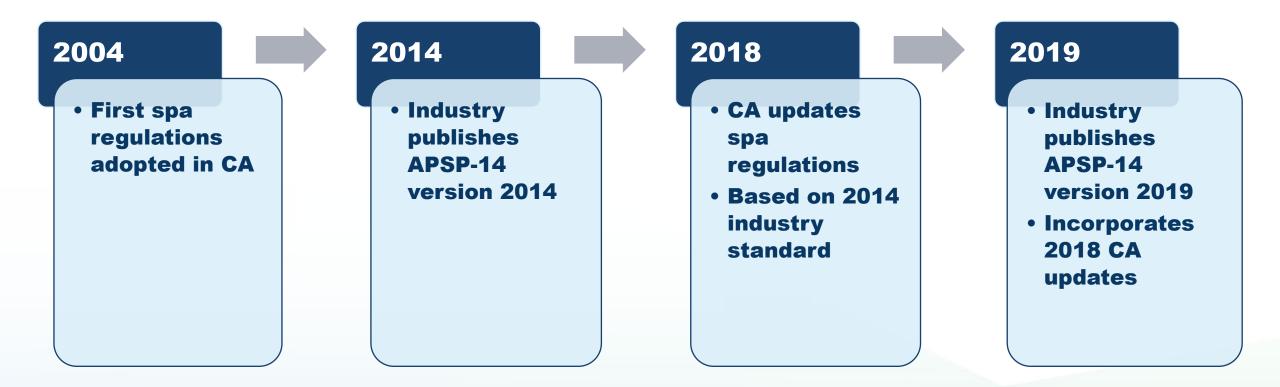
- Creates easily adoptable standards
- Reduces labeling confusion
- Eases compliance for manufacturers





- Amend existing portable electric spa regulations
- Will not affect existing performance standards
- Exempt under CEQA
- Key Dates:
  - 45-day comment period: May 14 June 28
  - Public Hearing: June 29



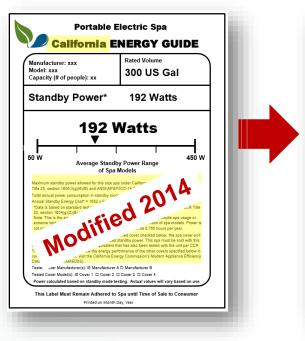


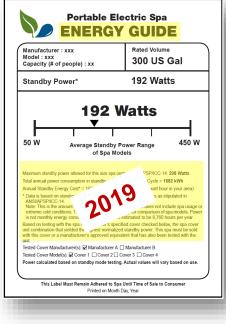




#### **Updates to standard:**

- Simplifies test lab certification
- Clarifies labeling instructions





#### **Updates to label:**

- Removes "California" from title
- Removes CA regulation
  references



- Adopt regulations amendments
- Adopt finding of CEQA exemption



#### Item 5: Blueprints for MD/HD ZEV Infrastructure (GFO-20-601)

July 15, 2021 Business Meeting

Kate Reid, Air Resources Engineer Fuels and Transportation Division Advanced Fuels & Vehicle Technologies Office, Freight & Transit Unit



#### Will Enable:

- Roadmaps for large-scale infrastructure projects
- Resiliency planning
- Best practices
- Lessons learned for replicability
- Process to meet Zero-Emission Vehicle (ZEV) regulations





### East Bay Community Energy (ARV-21-003)

- Infrastructure for Class 3-8 trucks for goods movement
- Benefits disadvantaged communities (DACs) surrounding I-80, I-580, and I-880







# Center for Transportation and the Environment (ARV-21-005)

- Infrastructure for up to 24 battery-electric school buses with Stockton Unified School District
- Located in & benefits DACs





# Ontario International Airport Authority (ARV-21-006)

- Infrastructure for electric ground support equipment at Ontario International Airport
- Located in low-income, DAC







### Los Angeles Cleantech Incubator (ARV-21-008)

- Infrastructure for charging depots adjacent to I-710 freight corridor to San Pedro Bay Ports
- Benefits DACs surrounding San Pedro Ports & I-710



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#### STC Traffic (ARV-21-010)

- Charging for San Diego County freight & goods movement, focused on Independent Owner Operators
- ZEV infrastructure benefits local DACs





Zero-emission drayage trucks deployed at the Port of San Diego



#### United Natural Foods, Inc. (ARV-21-011)

- Infrastructure for 12 CA distribution centers and/or warehouses
- Implementation provides direct benefits to surrounding disadvantaged and low-income communities.







### Kern Council of Governments (ARV-21-012)

- Infrastructure for zero-emission trucks and buses
- 81-90% of Kern County qualifies as DACs







# San Francisco Department of the Environment(ARV-21-013)

- Infrastructure for MD/HD ZEV fleets, particularly with 50 or fewer vehicles
- Benefits DACs





# Grossmont Union High School District (ARV-21-016)

- Infrastructure for conversion of 67 diesel-fueled school buses to fully electric fleet
- Benefits disadvantaged and low-income communities





### Approve

• 9 grant agreements

## Adopt

 Staff's determination that projects are exempt from CEQA



## Item 6: BESTFIT Innovative Charging Solutions – GFO-20-605

July 15, 2021 Business Meeting

Matt Alexander, Air Pollution Specialist Fuels and Transportation Division, Advanced Vehicle Infrastructure Office



- Innovation
- Customization
- Commercialization



Source: EVmatch



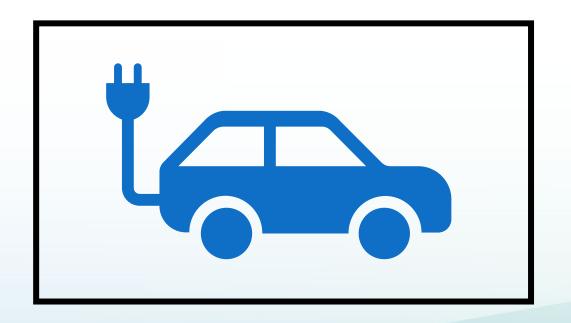
Source: CalMatters



Source: Electrek



- Sought charging solutions for light-, medium-, and heavy-duty vehicles
- 5 proposed light-duty agreements







#### Vehicle-to-vehicle mobile charging solution

Partnering with AAA Northern California to serve East Bay drivers



- Rescue stranded vehicles
- Reduce range anxiety
- Avoid expensive towing

## EVmatch, Inc. (ARV-21-002)

## Shared, reservable charging stations on multi-family properties

• 120 Level 2 chargers



- Easy to use and manage
- Accelerate equitable EV adoption

## **FLO Services USA, Inc. (ARV-21-004)**

### Use existing power for curbside charging

• 7 sites using 4 types of utility equipment

### **Key Project Benefits:**

- Minimize installation costs and grid impacts
- Increase access for those without home charging

#### 1) Street Pole



#### 2) Transformer





4) Street Light





#### Automated load management paired with battery storage

• Serve diverse group of drivers at UC San Diego



- Minimize installation costs and grid impacts
- Increase access for those without home charging

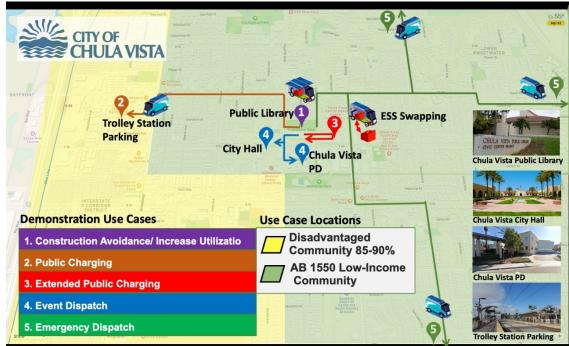


#### Mobile Charging with Solar and Storage

Charge 4 vehicles at once







- Demonstrate innovative technology
- Flexible solution for variety of use cases



- Approve 5 agreements
- Adopt staff's determination that action is exempt from CEQA



## Item 7: Zero-Emission Drayage Truck and Infrastructure Pilot Project (GFO-20-606)

July 15, 2021 Business Meeting

Marc Perry, Energy Commission Specialist I Fuels and Transportation Division Advanced Fuels & Vehicle Technologies Office, Freight & Transit Unit



## **Enables:**

- Reduced emissions
- Economic development
- Large-scale infrastructure demonstrations
- Resiliency and replicability



# South Coast Air Quality Management District (ARV-21-014)

- Construct 50 DCFC
- Solar-powered DER
- 2 fleet locations in DACs
- Workforce training & development



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# The Center for Transportation and the Environment (ARV-21-017)

- Hydrogen station for 22 fuel cell trucks
- Fueling station located in DAC
- Workforce training & development







Projects are exempt from CEQA

## Approve

- Agreement with SCAQMD for \$10,964,955
- Agreement with CTE for \$9,185,045



## Item 8: Mobile Renewable Backup Generation – GFO-20-310

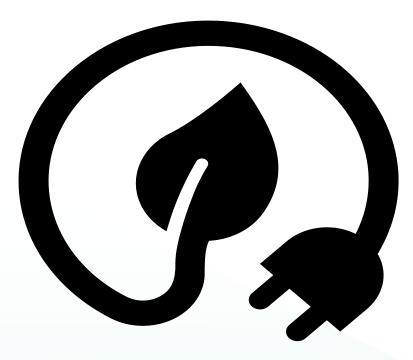
July 15, 2021 Business Meeting

Quenby Lum, Associate Energy Specialist Energy Research and Development Division Energy Systems Research Office



### Advances:

- Reliability
- Resiliency
- Safety
- Equity





- Fund technologies for mobile renewable backup generation.
- Clean emergency backup power solutions to offset or replace fossil fuel diesel generators.
- Support communities during Public Safety Power Shutoffs, wildfire events, and other grid outage events.



| Systems under 10kW       | Systems 10kW or higher               |
|--------------------------|--------------------------------------|
| <b>GRID Alternatives</b> | Electric Power<br>Research Institute |
|                          | One-Cycle Control                    |
|                          | Uprise Energy                        |



- Battery and solar PV
- 4kW output
- 4-hour recharge from outlet, 6-8 hours from 1.5kW solar PV
- ~15 minutes set up/take down
- Indoors, outdoors, from vehicle
- Small footprint for storage



Photo credits: Onyx Power

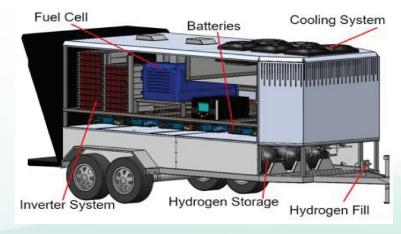


## **Electric Power Research Institute**

- Hydrogen fuel cells, hydrogen storage tank, and battery storage
- 35 kW of continuous operation for 24+ hours, with peak power capacity of 180 kW



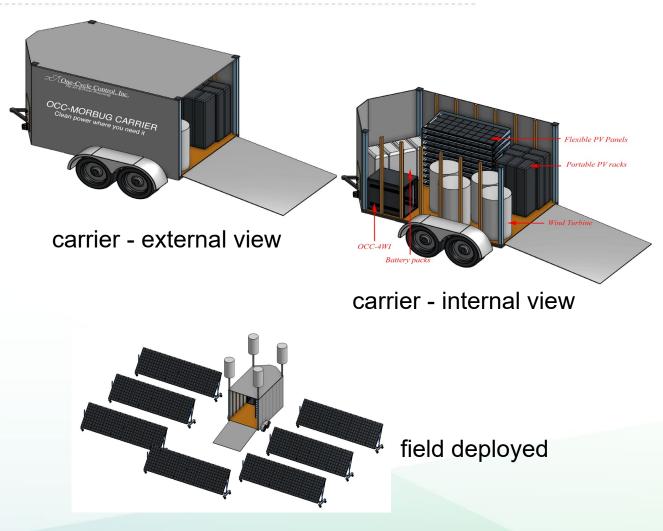
carrier - external view



carrier - internal view



- 15kW with wind, solar and battery.
- Electronic device or vehicle charging during normal grid operations.
- Complete setup/take down in 30 mins by 2 trained technicians.





- Wind turbine with solar PV and battery.
- 10 kW up to 14 hours (140 kWh) with no recharge. Up to 30 hours with wind + solar.
- Quick deployment for emergency response.



Photo credit: Uprise Energy







- Approve 4 grant agreements.
- Adopt staff's determination that action is exempt from CEQA.



## Item 9: Local Ordinance Applications (19-BSTD-06)

July 15, 2021 Business Meeting

Danuta Drozdowicz, Efficiency Specialist Efficiency Division, Building Standards Office



# Jurisdictions that adopt local ordinances:

- Are living laboratories for a clean energy future
- Reduce greenhouse gas emissions
- Lead from the grassroots



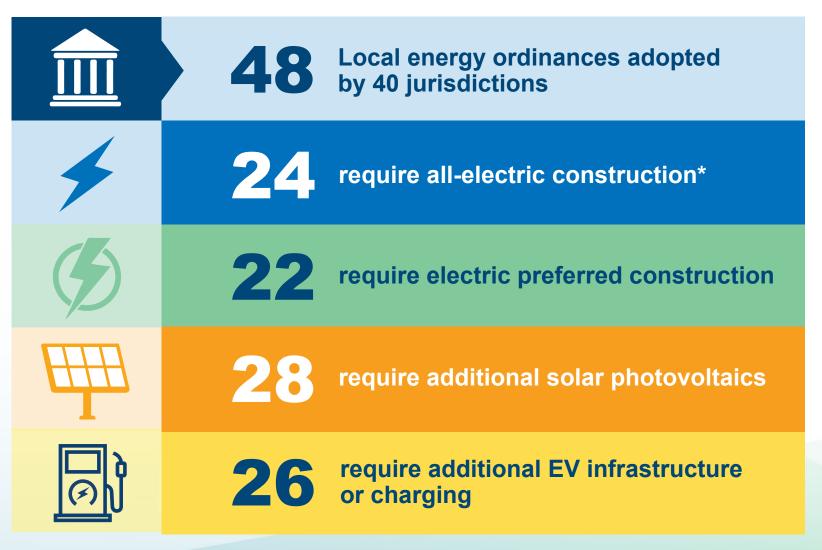
lives in a community with an energy code exceeding state standards



For local building efficiency standards to be enforceable:

- 1. Application filed with CEC shows standards are costeffective
- 2. CEC finds standards reduce energy consumption compared to current statewide Energy Code

## Local Ordinances Exceeding 2019 Building Energy Efficiency Standards





|   | Jurisdiction         | Cost<br>Effective | Energy<br>Reduction | Energy Efficiency or<br>All-Electric Provisions  | Exceptions   |
|---|----------------------|-------------------|---------------------|--|--|
| ) | City of<br>Daly City | yes               | yes                 | Requirements for all-<br>electric new construction<br>and for solar on new<br>nonresidential buildings | Applications such as<br>accessory dwelling<br>units, affordable<br>housing, commercial<br>kitchens, laboratories<br>and, for PV, shading,<br>limited solar access and<br>vegetative roofs. |



## Approve jurisdiction to enforce local ordinance